

# MSA Solaris™ Multigas Detector Sensor Replacement Kit

This instruction sheet contains instructions for replacing the following Solaris Multigas Detector Sensors:

- Combustible Sensor
- Oxygen (O<sub>2</sub>) Sensor
- Carbon Monoxide (CO) Sensor
- Hydrogen Sulfide (H<sub>2</sub>S) Sensor
- Nitrogen Dioxide (NO<sub>2</sub>) Sensor.

For Certificates, Approvals, Response Factors, Sensor Performance Specifications, and other information, refer to the Solaris Instruction Manual (P/N 10046201).

## Sensor Replacement

1. Verify that the instrument is turned OFF.
2. Remove the front case.
3. Gently lift out and properly discard the sensor to be replaced.
  - Remove the CO, H<sub>2</sub>S, or NO<sub>2</sub> sensor with a nonconductive or nonmetallic flat blade screwdriver or similar tool by pressing against the sensor holder tab only and lifting out the sensor:

- CO sensor holder tab is in upper left corner.
- H<sub>2</sub>S/NO<sub>2</sub> sensor holder tab is in upper right corner.
- Remove the combustible or oxygen sensor gently with your fingers only.

### WARNING

**Remove and reinstall sensors carefully, ensuring that the components are not damaged. Damage can adversely affect the intrinsic safety of the instrument and result in serious personal injury or death.**

4. Verify that combustible and oxygen sensor standoffs are installed.
  - Combustible Sensor Standoff (P/N 10046762)
  - O<sub>2</sub> Sensor Standoff (P/N 10046763)

**NOTE:** Sensor positions cannot be changed:

- The CO sensor must be placed in the red sensor holder.
  - The CO gasket in the sensor is also red.

- The H<sub>2</sub>S sensor must be placed in the blue sensor holder.
  - The H<sub>2</sub>S gasket in the sensor is also blue.
- The NO<sub>2</sub> sensor must be placed in the black sensor holder.
  - The NO<sub>2</sub> Gasket in the sensor is also black.

NOTE: H<sub>2</sub>S and NO<sub>2</sub> sensors cannot be interchanged or the instrument will not function properly. The replacement sensor must be the same type as what was originally installed in the instrument.

6. Carefully align the new sensor contact pins with the sockets on the pc board.
  - The proper sensor location is printed on the top pc board.
7. Press the new sensor into place.
  - Press the CO, H<sub>2</sub>S or NO<sub>2</sub> sensor into place by placing the sensor under the sensor holder tab first; then, press into place
    - If a CO, H<sub>2</sub>S or NO<sub>2</sub> sensor is not to be installed, ensure that a “dummy” cell (P/N 10046292) is installed properly in place.

8. Replace the sensor gasket and sensor filters in the front case.
9. Re-install the screws.
10. Allow the sensor to equilibrate with the environment for approximately five minutes after installing the sensor into the Solaris Multigas Detector.

**⚠ WARNING**

**Verification of calibration response is required; otherwise, the instrument will not perform as required, and persons relying on this product for their safety could sustain serious personal injury or death.**